

IN THE CLAIMS:

Please amend the claims to read as follows. This listing of claims will replace all prior versions, and listings, of claims in this application.

Claims 1-109 cancelled.

110. (Currently Amended) A multi-well plate comprising a plurality of wells, wherein at least two of said wells of said multi-well plate have antibodies immobilized on independently addressable electrodes centered at the bottom of said wells.

111. (Previously Presented) The multi-well plate of claim 110, wherein said electrodes comprise carbon.

112. (Previously Presented) The multi-well plate of claim 110, further comprising a mask having a plurality of holes sealed against said electrodes.

113. (Currently Amended) The multi-well plate of claim 110, wherein said electrodes comprise carbon black.

114. (Previously Presented) The multi-well plate of claim 110, wherein said electrodes comprise particulate carbon, carbon black, carbon felts, glassy carbon, carbon fibers, carbon fibrils or combinations thereof.

115. (Previously Presented) The multi-well plate of claim 110, wherein said electrodes comprise a composite material.

116. (Previously Presented) The multi-well plate of claim 110, wherein said electrodes comprise a composite material including a polymeric material and carbon particles.

117. (Previously Presented) The multi-well plate of claim 110, wherein said electrodes are from 0.01 to 1 mm in width or diameter.

118. (Previously Presented) The multi-well plate of claim 110, further comprising at least one counter electrode within each well.

119. (Previously Presented) The multi-well plate of claim 110, further comprising electrical contacts electrically connected to said electrodes.

120. (Previously Presented) A kit comprising, in one or more containers, the multi-well plate of claim 110 and one or more reagents.

121. (Previously Presented) The kit of claim 120, wherein said one or more reagents comprise an electrochemiluminescent label.

122. (Previously Presented) The kit of claim 120, wherein said one or more reagents comprise an electrochemiluminescent label comprising a metal-containing organic compound, wherein the

metal is selected from the group consisting of ruthenium, osmium, rhenium, iridium, rhodium, platinum, palladium, molybdenum, technetium and tungsten.

123. (Previously Presented) The kit of claim 120, wherein said one or more reagents comprise an electrochemiluminescent label comprising a Ru- or Os-containing organic compound.

124. (Previously Presented) An apparatus comprising a light detector and the multi-well plate of claim 110.

125. (Previously Presented) The apparatus of claim 124, further comprising electrical connectors capable of providing electrical energy to said electrodes.

126. (Previously Presented) The apparatus of claim 124, wherein said light detector is capable of scanning electrochemiluminescence signals emitted from said wells.

Claims 127-134 cancelled.

135. (Currently Amended) A multi-well plate comprising a plurality of wells in a standard multi-well format, wherein at least two of said wells of said multi-well plate have antibodies immobilized on independently addressable electrodes centered at the bottom of said wells.

136. (Currently Amended) A multi-well plate comprising a plurality of wells, wherein at least two of said wells of said multi-well plate have independently addressable electrodes centered at the

bottom of said wells and at least one counter electrode and further comprising a mask having a plurality of holes sealed against said electrodes, **and wherein said independently addressable electrodes have antibodies immobilized thereon.**

137. (Currently Amended) A multi-well plate comprising a plurality of wells, wherein at least two of said wells of said multi-well plate have independently addressable electrodes centered at the bottom of said wells and further comprising electrical contacts electrically connected to said electrodes, **and wherein said electrodes have antibodies immobilized thereon.**

138. (Previously Presented) The multi-well plate of claim 135, wherein said electrodes comprise carbon.

139. (Previously Presented) The multi-well plate of claim 136, wherein said electrodes comprise carbon.

140. (Previously Presented) The multi-well plate of claim 137, wherein said electrodes comprise carbon.

141. (Previously Presented) The multi-well plate of claim 135, further comprising a mask having a plurality of holes sealed against said electrodes.

142. (Previously Presented) The multi-well plate of claim 137, further comprising a mask having a plurality of holes sealed against said electrodes.

143. (Previously Presented) The multi-well plate of claim 135, wherein said electrodes comprise particulate carbon, carbon black, carbon felts, glassy carbon, carbon fibers, carbon fibrils or combinations thereof.

144. (Previously Presented) The multi-well plate of claim 136, wherein said electrodes comprise particulate carbon, carbon black, carbon felts, glassy carbon, carbon fibers, carbon fibrils or combinations thereof.

145. (Previously Presented) The multi-well plate of claim 137, wherein said electrodes comprise particulate carbon, carbon black, carbon felts, glassy carbon, carbon fibers, carbon fibrils or combinations thereof.

146. (Previously Presented) The multi-well plate of claim 135, wherein said electrodes comprise a composite material

147. (Previously Presented) The multi-well plate of claim 136, wherein said electrodes comprise a composite material

148. (Previously Presented) The multi-well plate of claim 137, wherein said electrodes comprise a composite material.

149. (Previously Presented) The multi-well plate of claim 135, wherein said electrodes comprise a composite material including a polymeric material and carbon particles.

150. (Previously Presented) The multi-well plate of claim 136, wherein said electrodes comprise a composite material including a polymeric material and carbon particles,

151. (Previously Presented) The multi-well plate of claim 137, wherein said electrodes comprise a composite material including a polymeric material and carbon particles

152. (Previously Presented) The multi-well plate of claim 135, wherein said electrodes are from 0.01 to 1 mm in width or diameter

153. (Previously Presented) The multi-well plate of claim 136, wherein said electrodes are from 0.01 to 1 mm in width or diameter.

154. (Previously Presented) The multi-well plate of claim 137, wherein said electrodes are from 0.01 to 1 mm in width or diameter.

155. (Previously Presented) The multi-well plate of claim 135, further comprising at least one counter electrode within each well.

156. (Previously Presented) The multi-well plate of claim 137, further comprising at least one counter electrode within each well.

157. (Previously Presented) The multi-well plate of claim 135, further comprising electrical contacts electrically connected to said electrodes.

158. (Previously Presented) The multi-well plate of claim 136, further comprising electrical contacts electrically connected to said electrodes.

159. (Previously Presented) The multi-well plate of claim 110, wherein said multi-well plate has a standard form for multi-well microtiter plates.

160. (Previously Presented) The multi-well plate of claim 136, wherein said multi-well plate has a standard form for multi-well microtiter plates.

161. (Previously Presented) The multi-well plate of claim 137, wherein said multi-well plate has a standard form for multi-well microtiter plates.

162. (Previously Presented) The multi-well plate of claim 110, wherein said multi-well plate is a 24-well, a 96-well or 384-well plate.

163. (Previously Presented) The multi-well plate of claim 135, wherein said multi-well plate is a 24-well, a 96-well or 384-well plate.

164. (Previously Presented) The multi-well plate of claim 136, wherein said multi-well plate is a 24-well, a 96-well or 384-well plate.

165. (Previously Presented) The multi-well plate of claim 137, wherein said multi-well plate is a 24-well, a 96-well or 384-well plate,

166. (Previously Presented) The multi-well plate of claim 110, further comprising a electrochemiluminescent label.

167. (Previously Presented) The multi-well plate of claim 135, further comprising a electrochemiluminescent label

168. (Previously Presented) The multi-well plate of claim 136, further comprising a electrochemiluminescent label.

169. (Previously Presented) The multi-well plate of claim 137, further comprising a electrochemiluminescent label

170. (Previously Presented) A kit comprising, in one or more containers, the multi-well plate of claim 135 and one or more reagents.

171. (Previously Presented) The kit of claim 170, wherein said one or more reagents comprise an electrochemiluminescent label.

172. (Previously Presented) The kit of claim 170, wherein said one or more reagents comprise an electrochemiluminescent label comprising a metal-containing organic compound, wherein the metal is selected from the group consisting of ruthenium, osmium, rhenium, iridium, rhodium, platinum, palladium, molybdenum, technetium and tungsten

173. (Previously Presented) The kit of claim 170, wherein said one or more reagents comprise an electrochemiluminescent label comprising a Ru- or Os-containing organic compound.

174. (Previously Presented) An apparatus comprising a light detector and the multi-well plate of claim 135.

175. (Previously Presented) The apparatus of claim 174, further comprising electrical connectors capable of providing electrical energy to said electrodes

176. (Previously Presented) The apparatus of claim 174, wherein said light detector is capable of scanning elecrochemiluminescence signals emitted from said wells.

177. cancelled.